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W. Kisiel et al., "Isolation and Characterization of Human Factor VIIa",
Thromb. Res. 22:375-380, 1981.

K. Katayama et al., "Comparison of Amino Acid Sequence of Bovine Coagulation Factor IX (Christmas Factor) with that of Other Vitamin K-Dependent
Plasma Proteins", Proc. Natl. Acad. Sci. USA 76:4990-4994, 1979.

E.W. Davie et al., "Basic Mechanisms in Blood Coagulation", Ann. Rev.
Biochem. 44:799-824, 1975.

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